Neophorichaeta johnsoni Smith.1

I am under obligations to Dr. C. H. T. Townsend in kindly calling my attention to the possible synonymy of the above species with that of *Tricogena setipennis* Coq.² Mr. W. R. Walton has graciously compared the paratype of N. johnsoni with Coquillett's holotype of setipennis and finds them identical. Coquillett had the female and the specimens from which N. johnsoni were described were the males. Thus, N. johnsoni becomes a synonym of Tricogena setipennis Coq.

Two Hundred and Ninety-Second Meeting, February 6, 1916.

The 292nd meeting of the Society was entertained by Dr. L. O. Howard at the Saengerbund Hall, February 3, 1916. There were present Messrs. Ainslie, C. N. Ainslie, C. G. Baker, Barber, Borden, Böving, Busck, Caudell, Craighead, Crawford, Cushman, DeGryse, Ely, Fink, Fisher, Gahan, Garner, Greene, Heinrick, Heidemann, Howard, Isely, Kewley, Knab, Kotinsky, Middleton, Paine, Pierce, Quaintance, Rohwer, Sanford, Schwarz, Shannon, Simanton, Snyder, Turner, Walton, Webb, and Wood, members, and H. A. Ingerson and T. D. Urbahns, visitors.

The following program was presented:

A new Interpretation of the Relationships of Temperature and Humidity to Insect Development. By W. Dwight Pierce.3

MORE LIGHT ON MYIOPHASIA.4

(Diptera, Tachinidae.)

By J. M. Aldrich.

Cereal and Forage Crop Insect Investigations, Bureau of Entomology.

After reading with much interest the analysis of this group published in the September number of the Proceedings (vol. xvii, pp. 107-114), the thought occurred to me that it might be possible to get additional information about Wiedemann's Montevideo specimen, type of aenea and this species the type of Myiophasia. I accordingly addressed a letter to the well-known Vienna

¹ Psyche, vol. xxii, No. 3. ² Revis. Tach., p. 130.

³ Withdrawn for publication in Journ. Agr. Research.

⁴ Published by permission of Chief of Bureau.

dipterist Friedrich Hendel, asking him to look at the type and answer certain specific questions about it, also to send sketch of head profile and wing.

Owing to the absence of Hendel, the latter was answered by Dr. Zerny, Custodian of Diptera, giving the following information:

Wiedemann's type is a male in pretty poor condition. The eyes are naked; I enclose a diagrammatic drawing of the head in profile. The bristling of the abdomen is for the most part lost by abrasion; but it can be seen that on the first and second segments macrochaetæ are wholly wanting; on the third and fourth the scars of a row of marginal bristles are present on each. A sketch of the wing-venation is also enclosed.

The three specimens from Georgia $(2 \vec{\sigma} \vec{\sigma}, 1)$ φ agree perfectly with the type; the eyes are naked in both sexes, the apical cell

open.

The part of the work of Brauer and Bergenstamm in which *Myiophasia* was published, appeared at the latest in November 1891; *Myiophasia* therefore has priority over Townsend's name, which was published in December.

The accompanying pencil sketches, copied by me with the

utmost care, are submitted herewith.



Fig. 1. Myiophasia aenea, type, from sketches by Dr. H. Zerny.

The letter and wing figure appear to settle beyond all further question that Mr. Townsend's *Phasioclista metallica* is a synonym

of Myiophasia aenea.

Incidentally, the establishment of this fact has some bearing on Mr. Townsend's theory that the various forms of *Myiophasia* are each closely associated with a certain ecological environment. *Aenea*, it appears, occurs from Montevideo to Maryland and Illinois; I have it also from New Bedford, Mass., and Fort Collins, Colo. Townsend recognizes seven principal life zones, of which this form has been collected in five. Referring to his tabulation (op. cit., p. 111), it appears that *setigera* has been collected

twice, in two zones; setigera oregonensis twice, in two zones; clistoides twice, in two zones; mesensis once, necessarily in one zone; sierricola twice, in one zone; robusta once, necessarily in one zone; ruficornis twice, in two zones; nigrifrons several times, through a range of five zones; globosa several times, through a range of five zones. Looking at the facts from this point of view, one would hesitate to say, "The impress of the environment is upon each of them."

In discussion of this paper Dr. Townsend presented the following:

NOTE ON MYIOPHASIA AENEA WD.

BY CHARLES H. T. TOWNSEND.

Dr. Aldrich has kindly sent me letter received from Dr. H. Zerny, of the Vienna Museum, giving certain structural details of the holotype of this species, together with a drawing showing venation and side view of head. The holotype is a male. In my synopsis of the Myiophasia group published in the Proceedings of the Society last year, the characters furnished by Zerny lead unmistakably to couplet 11, and there agrees with Phasioclista in the absence of median marginal macrochaetae on second abdominal segment. But otherwise they agree with Myiophasia and not with Phasioclista. Males of the form given as Phasioclista metallica in my synopsis, from the Atlantic coast region, show the front not produced in profile and the hind crossvein normally in middle between small crossvein and bend of fourth vein. The drawing by Zerny shows the front well produced and the hind crossvein nearer to bend of fourth vein (20) mm, from small crossvein and 13 mm, from bend), agreeing perfectly with males of Myiophasia setigera from the western mountain region (New Mexico).

The information supplied by Zerny is thankfully received, but does not decide the matter. The lack of bristles on second segment of Wiedemann's holotype may be abnormal. A good series of specimens from Montevideo, the holotype locality, as well as further study of the holotype in connection with same, will be absolutely necessary to decide the question. In any event, the characters furnished by Zerny show that aenea Wd. is not conspecific with metallica Towns., and hence will need a new name,

as it is preoccupied by Tachina aenea Mg. (1824).

In this connection, I note that my original description of *Phasioclista metallica* does not agree fully with the specimens of the form given under that name in the above-mentioned synopsis.